

Abstract

A ship having a multi-mode hull where the draft, seakeeping, and payload-carrying capacity are varied to match the requirements of the required mission.

- 5 For example, the ship has a hull with first and second hull portions and with an interconnecting hull structure, and has a ballasting system within the hull portions and operable to adjust the draft of the vessel in conjunction with the payload carried by the ship so that the ship can perform a designated mission. The hull is designed to have an adjustable hull depth according to the payload carried to perform the mission and
- 10 augmented by the ballasting system so as to optimize draft, and thus hull mode, to meet mission requirements. As a result, the ship operates in four distinct modes as follows: very shallow draft (logistics mode), shallow draft (catamaran mode), moderate draft (SWATH mode), and deep draft (stealth/low-freeboard mode)